

ABSTRACT OF THE DISCLOSURE

A predetermined area of input image data (100) is read and stored into a memory section (1). As soon as data is stored in the data read memory section (1), wavelet conversion filtering is performed on the image area, in the horizontal or vertical direction, by a wavelet conversion section (5). The wavelet conversion section (5) comprises a fixed-point type wavelet conversion section (3) and an integer type wavelet conversion section (4). Data from the data read memory section (1) is switched and controlled by a switching section (2), and supplied to either the fixed-point wavelet conversion section (3) or the integer type wavelet conversion section (4).